

CLAIMS

1. A method comprising:
receiving a user search request;
identifying context information for the user; and
determining search criteria corresponding to the user search request by
combining the user search request and the current context information.
2. A method as recited in claim 1, further comprising performing a
search of an information source using the search criteria.
3. A method as recited in claim 1, wherein identifying context
information for the user comprises identifying current context information for the
user.
4. A method as recited in claim 1, wherein the determining comprises
generating a product interest characterization having a plurality of fields, wherein
one or more of the plurality of fields includes data, received from the user,
corresponding to the user search request, and wherein another one or more of the
plurality of fields includes data, received from a context awareness model, that
represents the context information for the user.

1 5. A method as recited in claim 1, wherein receiving the user search
2 request comprises receiving, as at least part of the user search request, one or more
3 keywords.

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5 6. A method as recited in claim 1, wherein receiving the user search
6 request comprises receiving, as at least part of the user search request,
7 authorization information that indicates how much data can be provided to
8 different classes of product information providers.

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10 7. A method as recited in claim 1, further comprising:
11 communicating the search criteria to one or more search components;
12 receiving search results from at least one of the one or more search
13 components; and
14 presenting the search results to the user.

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16 8. A method as recited in claim 7, further comprising:
17 filtering, after receiving the search results, the search results based on the
18 appropriateness of the search results; and
19 wherein presenting the search results to the user comprises presenting only
20 appropriate search results to the user.

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22 9. A method as recited in claim 7, further comprising:
23 determining an appropriate time to present the search results; and
24 wherein presenting the search results to the user comprises waiting until the
25 appropriate time to present the search results to the user.

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2 10. A method as recited in claim 1, wherein the user search request is a
3 request to retrieve information regarding one or more of a product or a service.
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5 11. A method as recited in claim 1, wherein the user search request is a
6 request to obtain a product.
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8 12. A method as recited in claim 11, wherein the search criteria is to be
9 submitted to one or more search components via a network, and wherein the
10 product is to be returned to the user via the network.
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12 13. A method as recited in claim 11, wherein the search criteria is to be
13 submitted to one or more search components via a network, and wherein the
14 product is to be returned to the user via shipping external from the network.
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16 14. A method as recited in claim 1, wherein the context information
17 comprises information regarding one or more of: the user's physical environment,
18 the user's mental environment, the user's computing environment, and the user's
19 data environment.
20

21 15. A method as recited in claim 1, wherein the context information
22 comprises information regarding two or more of: the user's physical environment,
23 the user's mental environment, the user's computing environment, and the user's
24 data environment.
25

1 16. A method as recited in claim 1, wherein the context information
2 comprises physical environment information pertaining to one or more of: the
3 user's present location and the current time.

4
5 17. A method as recited in claim 1, wherein the context information
6 comprises mental environment information pertaining to one or more of: the
7 user's likely intentions, the user's preferences, and the user's current attention.

8
9 18. A method as recited in claim 1, wherein the context information
10 comprises computing environment information pertaining to one or more of:
11 computing capabilities of a client computer being used by the user, available I/O
12 devices of the client, processing capabilities of the client, and available storage
13 space on the client.

14
15 19. A method as recited in claim 1, wherein the context information
16 comprises data environment information pertaining to data and software resources
17 on a client computer being used by the user.

18
19 20. A method as recited in claim 1, further comprising:
20 generating a profile corresponding to the user; and
21 saving the search criteria associated with the search request as
22 corresponding to the profile.

23
24 21. A method as recited in claim 1, further comprising:
25 displaying a form to the user for entry of parameters of the search request;

1 automatically populating fields of the form with data based on the context
2 information.

3
4 **22.** A method as recited in claim 21, further comprising not displaying
5 the fields of the form that are automatically populated based on the context
6 information.

7
8 **23.** One or more computer-readable media storing computer-executable
9 instructions that, when executed, direct a computer to:

10 receive a request to generate a product interest characterization;
11 receive one or more pieces of data corresponding to the request;
12 create a new product interest characterization in response to the request;
13 populate one or more fields of the product interest characterization with the
14 one or more pieces of data; and

15 populate one or more additional fields of the product interest
16 characterization with data representing context information for a user associated
17 with the request.

18
19 **24.** One or more computer-readable media as recited in claim 23,
20 wherein the user associated with the request is the user that initiated the request.

21
22 **25.** One or more computer-readable media as recited in claim 23,
23 wherein the context information comprises current context information.
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1 26. One or more computer-readable media as recited in claim 23,
2 wherein receiving one or more pieces of data corresponding to the request
3 comprises receiving, from the user, the one or more pieces of data corresponding
4 to the request.

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6 27. One or more computer-readable media as recited in claim 23,
7 wherein the context information comprises information regarding one or more of:
8 the user's physical environment, the user's mental environment, the user's
9 computing environment, and the user's data environment.

10
11 28. One or more computer-readable media as recited in claim 23,
12 wherein the context information comprises physical environment information
13 pertaining to one or more of: the user's present location and the current time.

14
15 29. One or more computer-readable media as recited in claim 23,
16 wherein the context information comprises mental environment information
17 pertaining to one or more of: the user's likely intentions, the user's preferences,
18 and the user's current attention.

19
20 30. One or more computer-readable media as recited in claim 23,
21 wherein the context information comprises computing environment information
22 pertaining to one or more of: computing capabilities of a client computer being
23 used by the user, available I/O devices of the client, processing capabilities of the
24 client, and available storage space on the client.
25

1 **31.** One or more computer-readable media as recited in claim 23,
2 wherein the context information comprises data environment information
3 pertaining to data and software resources on a client computer being used by the
4 user.

5
6 **32.** One or more computer-readable media as recited in claim 23, further
7 comprising computer-executable instructions that, when executed, direct the
8 computer to:

9 display a form to the user for entry of parameters of the search request; and
10 automatically populate fields of the form with data based on the context
11 information.

12
13 **33.** One or more computer-readable media as recited in claim 32,
14 computer-executable instructions that, when executed, direct the computer to not
15 display the fields of the form that are automatically populated based on the context
16 information.

17
18 **34.** One or more computer-readable media as recited in claim 23, further
19 comprising computer-executable instructions that, when executed, direct the
20 computer to:

21 communicate the search criteria to one or more search components;
22 receive search results from at least one of the one or more search
23 components; and
24 present the search results to the user.
25

1 35. A method as recited in claim 34, further comprising computer-
2 executable instructions that, when executed, direct the computer to:

3 determine an appropriate time to present the search results; and
4 wait until the appropriate time to present the search results to the user.

5
6 36. A method comprising:

7 sensing a current context of a user;

8 generating search criteria based at least in part on the current context of the
9 user and one or more search parameters identified by the user; and

10 retrieving, from one or more information sources, information satisfying
11 the search criteria.

12
13 37. A method as recited in claim 36, wherein the current context
14 comprises information regarding one or more of: the user's current physical
15 environment, the user's current mental environment, the user's current computing
16 environment, and the user's current data environment.

17
18 38. A method as recited in claim 36, wherein the current context
19 comprises information regarding two or more of: the user's current physical
20 environment, the user's current mental environment, the user's current computing
21 environment, and the user's current data environment.

1 **39.** A method as recited in claim 36, wherein the current context
2 comprises physical environment information pertaining to one or more of: the
3 user's present location and the current time.

4
5 **40.** A method as recited in claim 36, wherein the current context
6 comprises mental environment information pertaining to one or more of: the
7 user's likely intentions, the user's preferences, and the user's current attention.

8
9 **41.** A method as recited in claim 36, wherein the current context
10 comprises computing environment information pertaining to one or more of:
11 computing capabilities of a client computer being used by the user, available I/O
12 devices of the client, processing capabilities of the client, and available storage
13 space on the client.

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15 **42.** A method as recited in claim 36, wherein the current context
16 comprises data environment information pertaining to data and software resources
17 on a client computer being used by the user.

18
19 **43.** A method as recited in claim 36, wherein the information comprises
20 advertisements.

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22 **44.** A method as recited in claim 36, wherein the information comprises
23 product descriptions.
24
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1 **45.** One or more computer-readable media storing computer-executable
2 instructions that, when executed, direct a computer to:

3 receive a search request, wherein the search request is based at least in part
4 on both user-defined parameters and current context information of the user.

5
6 **46.** One or more computer-readable media as recited in claim 45,
7 wherein the current context information comprises information regarding one or
8 more of: the user's physical environment, the user's mental environment, the
9 user's computing environment, and the user's data environment.

10
11 **47.** One or more computer-readable media as recited in claim 45,
12 wherein the current context information comprises physical environment
13 information pertaining to one or more of: the user's present location and the
14 current time.

15
16 **48.** One or more computer-readable media as recited in claim 45,
17 wherein the current context information comprises mental environment
18 information pertaining to one or more of: the user's likely intentions, the user's
19 preferences, and the user's current attention.

1 **49.** One or more computer-readable media as recited in claim 45,
2 wherein the current context information comprises computing environment
3 information pertaining to one or more of: computing capabilities of a client
4 computer being used by the user, available I/O devices of the client, processing
5 capabilities of the client, and available storage space on the client.

6
7 **50.** One or more computer-readable media as recited in claim 45,
8 wherein the current context information comprises data environment information
9 pertaining to data and software resources on a client computer being used by the
10 user.

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12 **51.** A method comprising:
13 receiving a search request;
14 identifying user-input parameters corresponding to the search request;
15 identifying user context parameters, corresponding to the search request,
16 that represent a context of the user;
17 comparing both the user-input parameters and the user context parameters
18 to data describing content; and
19 identifying content, based at least in part on the comparing, that matches
20 both the user-input parameters and the user context parameters.

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22 **52.** A method as recited in claim 51, wherein the search request
23 comprises a product interest characterization.
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1 **53.** A method as recited in claim 51, wherein the context of the user
2 comprises the user's current context at the time of activating the search request.

3
4 **54.** A method as recited in claim 51, wherein the context of the user
5 comprises the user's current context at the time of generating the search request.

6
7 **55.** A method as recited in claim 51, wherein the data comprises a
8 plurality of product characterizations.

9
10 **56.** A method as recited in claim 51, wherein the user context comprises
11 information regarding multiple ones of: the user's physical environment, the
12 user's mental environment, the user's computing environment, and the user's data
13 environment.

14
15 **57.** A method as recited in claim 51, wherein the user context comprises
16 physical environment information pertaining to one or more of: the user's location
17 and a time of the search request.

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19 **58.** A method as recited in claim 51, wherein the user context comprises
20 mental environment information pertaining to one or more of: the user's likely
21 intentions, the user's preferences, and the user's current attention.

1 59. A method as recited in claim 51, wherein the user context comprises
2 computing environment information pertaining to one or more of: computing
3 capabilities of a client computer being used by the user, available I/O devices of
4 the client, processing capabilities of the client, and available storage space on the
5 client.

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7 60. A method as recited in claim 51, wherein the current context
8 comprises data environment information pertaining to data and software resources
9 on a client computer being used by the user.

10
11 *sub* *AT* 61. A system comprising:
12 a characterization module configured to characterize a user's context; and
13 a search criteria generator configured to generate search criteria
14 corresponding to a user search request, wherein the search criteria is coupled to
15 receive a user search request via one or more input devices, and further coupled to
16 receive the user's context from the characterization module.

17
18 62. A system as recited in claim 61, wherein the characterization
19 module is configured to characterize the user's content based on input received
20 from a plurality of sensors, wherein the plurality of sensors sense one or more of:
21 the user's physical environment, the user's mental environment, the user's
22 computing environment, and the user's data environment.

1 68. A system as recited in claim 67, wherein the context information
2 comprises information regarding one or more of: the user's physical environment,
3 the user's mental environment, the user's computing environment, and the user's
4 data environment.

5
6 69. A system as recited in claim 67, further comprising:
7 means for communicating the search criteria to one or more search
8 components;
9 means for receiving search results from at least one of the one or more
10 search components; and
11 means for presenting the search results to the user.

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